

\*\*\* It is now 2010/08/19 16:36:37 \*\*\*

File 347:JAPIO Dec 1976-2010/Apr(Updated 100726)

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Set	Items	Description
S1	0	AU=DREAN HENRI
S2	9766	IC=(H05B-031/26 OR A61L-009/18 OR A61L-009/22 OR H05B-041/24 OR H05H-001/24)
S3	139973	PLASMA? ?
S4	299815	CONTAMINAT???? OR FUNG??? OR VIRUS?? OR SPORE? ? OR DECONTAMINAT???? OR POLLUT???? OR STAIN? ? OR SOIL????
S5	8230	S4 (4N) (DETECT???? OR MONITOR???? OR ISOLAT???? OR DETERMIN???? OR RECOGNI???? OR EVALUAT???? OR IDENTIF???? OR ASSESS???? OR RECORD??? OR ANALY???? OR VALIDAT???? OR MEASUR???? OR SENS??? OR CALCULAT???? OR SAMPLING)
S6	16151	S4 (5N) (GAS OR GASSES OR GASEOUS OR CHAMBER? ? OR MEDIUM OR VESSEL? ? OR AIR OR FLUID? ?)
S7	1767684	VOLTAGE? ? OR CURRENT? ? OR POWER OR RF OR FREQUENC???
S8	639983	(S7 OR SIGNAL? ?) (4N) (INCREAS??? OR DECREAS??? OR TRANSFORM???? OR CONTROL??? OR REGULAT???? OR GOVERN??? OR MANAG???? OR VARY??? OR READJUST???? OR ADJUST??? OR MODIF???? OR CHANG??? OR ALTER??? OR CALIBRAT???? OR COMPENSAT???? OR MANIPULAT???? OR FEEDBACK OR CORRECT???? OR RECTIF???? OR TRANSFORM????)
S9	467	S6 AND S8
S10	9	S3 AND S9
S11	3349	(DIRT? ? OR IMPURIT???) (4N) (DETECT???? OR MONITOR???? OR ISOLAT???? OR DETERMIN???? OR RECOGNI???? OR EVALUAT???? OR IDENTIF???? OR ASSESS???? OR RECORD??? OR ANALY???? OR VALIDAT???? OR MEASUR???? OR SENS??? OR CALCULAT???? OR SAMPLING)
S12	221	S8 AND S11
S13	12	S12 AND S2:S3
S14	11	S13 NOT S10
S15	9	S3 AND S9
S16	9	S15 NOT S14
S17	5682	(DIRT? ? OR IMPURIT???) (5N) (GAS OR GASSES OR GASEOUS OR CHAMBER? ? OR MEDIUM OR VESSEL? ? OR AIR OR FLUID? ?)
S18	162	(S5 OR S11) AND (S17 OR S6) AND S8
S19	159	S18 NOT (S14 OR S10)
S20	143	S19 NOT PD>2002
S21	7875	ECR OR ECRS OR GYRO?
S22	0	S20 AND S21
S23	522197	ELECTRODE? ?
S24	16	S20 AND S23
Set	Items	Description
S1	139973	PLASMA? ?
S2	410123	CONTAMINAT???? OR FUNG??? OR VIRUS?? OR SPORE? ? OR DECONTAMINAT???? OR POLLUT???? OR STAIN? ? OR SOIL???? OR DIRT? ? OR IMPURIT???
S3	0	S3 (4N) (DETECT???? OR MONITOR???? OR ISOLAT???? OR DETERMIN???? OR RECOGNI???? OR EVALUAT???? OR IDENTIF???? OR ASSESS???? OR RECORD??? OR ANALY???? OR VALIDAT???? OR MEASUR???? OR SENS??? OR CALCULAT???? OR SAMPLING)

S4 11490 S2 (4N) (DETECT???? OR MONITOR???? OR ISOLAT???? OR DETERMIN???? OR  
RECOGNI???? OR EVALUAT???? OR IDENTIF???? OR ASSESS???? OR RECORD??? OR  
ANALY???? OR VALIDAT???? OR MEASUR???? OR SENS??? OR CALCULAT???? OR SAMPLING)

S5 283 S1 AND S4

S6 828884 VESSEL? ? OR CHAMBER? ? OR BOWL? ? OR TANK? ? OR CONTAINER? ?

S7 72 S5 AND S6

S8 62 S7 NOT PD>2002

10/9/4

DIALOG(R)File 347: JAPIO

04580118 \*\*Image available\*\*

**PROCESSING CHAMBER POLLUTION DETECTOR**

**Pub. No.:** 06-252018 [JP 6252018 A ]

**Published:** September 09, 1994 (19940909)

**Inventor:** TOYODA KAZUYUKI

**Applicant:** KOKUSAI ELECTRIC CO LTD [000112] (A Japanese Company or Corporation), JP (Japan)

**Application No.:** 05-057690 [JP 9357690]

**Filed:** February 23, 1993 (19930223)

**International Class:** [ 5 ] H01L-021/02; G01R-027/18; H05H-001/00

**JAPIO Class:** 42.2 (ELECTRONICS -- Solid State Components); 42.3 (ELECTRONICS -- Electron Tubes); 46.1 (INSTRUMENTATION -- Measurement)

**JAPIO Keyword:** R004 (PLASMA)

**Journal:** Section: E, Section No. 1640, Vol. 18, No. 643, Pg. 2, December 07, 1994 (19941207)

**ABSTRACT**

**PURPOSE:** To provide a dirt detecting means which can judge cleaning period, based on the measured data on dirt degree by installing a detector, which can directly detect the degree of dirt, inside a processing chamber so as to accurately know the cleaning period of the inside of a processing chamber.

**CONSTITUTION:** This detector comprises a current detecting plate 17, which is installed inside the processing chamber 1 of a device for performing various processing, making use of **plasma**, and a measure system 16, which detects the current 34 flowing between this current detecting plate 17 and an earth 28, and this judges the degree of dirt of the inside of the processing chamber 1, making use of the **current changing** when the surface of the current detecting plate 17 becomes dirty.

10/9/5

DIALOG(R)File 347: JAPIO

03248732 \*\*Image available\*\*

**ETCHING DEVICE**

**Pub. No.:** 02-224232 [JP 2224232 A ]

**Published:** September 06, 1990 (19900906)

**Inventor:** ITO YOICHI

KAKEHI YUTAKA

KAWAHARA HIRONORI

**Applicant:** HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)

**Application No.:** 01-042975 [JP 8942975]

**Filed:** February 27, 1989 (19890227)

**International Class:** [ 5 ] H01L-021/302; C23F-004/00

**JAPIO Class:** 42.2 (ELECTRONICS -- Solid State Components); 12.6 (METALS -- Surface Treatment)

**JAPIO Keyword:** R004 (PLASMA); R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessors)

**Journal:** Section: E, Section No. 1004, Vol. 14, No. 528, Pg. 138, November 20, 1990 (19901120)

**ABSTRACT**

**PURPOSE:** To reduce foreign matter adhering to a sample by performing **plasma** generation by the signal from a pollution degree detection means which detects the **pollution** degree inside an etching treatment **chamber**.

**CONSTITUTION:** The **pollution** degree inside a treatment **chamber** 10 is detected point by point during sample treatment by a pollution degree detection means 80, and at the point of time when it is judged that cleaning is necessary, a cleaning-necessary **signal** is output to a **control** means 9 by the means 80. The **control signal** of **plasma** generation start is output to a **plasma** generation means from a control means 90, and gas for cleaning treatment is introduced into the treatment chamber 10, and at the same time it is adjusted to the specified cleaning treatment pressure, and the cleaning treatment gas is made into **plasma**, and the inside of the treatment chamber 10 is cleaned. Hereby, foreign matter adhering to a sample during etching treatment can be reduced steadily.

14/9/3

DIALOG(R)File 347: JAPIO

05709469 \*\*Image available\*\*

**VACUUM TREATING DEVICE****Pub. No.:** 09-324269 [JP 9324269 A ]**Published:** December 16, 1997 (19971216)**Inventor:** SATO KAZUTOSHI**Applicant:** FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 09-023385 [JP 9723385]**Filed:** February 06, 1997 (19970206)**International Class:** [ 6 ] C23C-014/54; G01N-027/00; H01L-021/02; H01L-021/203; H01L-021/205; H01L-021/3065**JAPIO Class:** 12.6 (METALS -- Surface Treatment); 36.1 (LABOR SAVING DEVICES -- Industrial Robots); 42.2 (ELECTRONICS -- Solid State Components); 46.2 (INSTRUMENTATION -- Testing)**JAPIO Keyword:** R004 (PLASMA); R020 (VACUUM TECHNIQUES); R100 (ELECTRONIC MATERIALS -- Ion Implantation); R107 (INFORMATION PROCESSING -- OCR & OMR Optical Readers)**ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide vacuum treating technology correcting the sensitivity of a gas volume detector and capable of stably **detecting** the contents of **impurity** gases.

**SOLUTION:** This vacuum treating method by a vacuum treating device is constituted in such a manner that it has a treating vessel 1 capable of being evacuated, a gas introducing means 15 for introducing a treating gas into the treating vessel 1 and a gas volume detector 45 outputting gas volume signals corresponding to the gaseous partial pressures in the treating vessel for the classification of the gases. In this case, in the gas volume detector 45, the detected sensitivity is set in accordance with the sensitivity **correcting signals** given from the outside, and it produces the gas volume signals by the set detected sensitivity and outputs the same. A controlling means receives the gas volume signals outputted from the gas volume detector 45 and transmits the sensitivity **correcting signals** to the gas volume detector 45 in such a manner that the dimension of the gas volume signal corresponding to one standard gas selected from the gases contained in the treating gas approaches the target value.

14/9/4

DIALOG(R)File 347: JAPIO

05709468 \*\*Image available\*\*

**VACUUM TREATING DEVICE****Pub. No.:** 09-324268 [JP 9324268 A ]**Published:** December 16, 1997 (19971216)**Inventor:** SATO KAZUTOSHI**Applicant:** FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 08-146286 [JP 96146286]**Filed:** June 07, 1996 (19960607)**International Class:** [ 6 ] C23C-014/54; H01L-021/203; H01L-021/205; H01L-021/265; H01L-021/3065**JAPIO Class:** 12.6 (METALS -- Surface Treatment); 36.1 (LABOR SAVING DEVICES -- Industrial Robots); 42.2 (ELECTRONICS -- Solid State Components)**JAPIO Keyword:** R004 (PLASMA); R020 (VACUUM TECHNIQUES); R100 (ELECTRONIC MATERIALS -- Ion Implantation); R107 (INFORMATION PROCESSING -- OCR & OMR Optical Readers)**ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide vacuum treating technology correcting the sensitivity of a gas volume detector and capable of stably **detecting** the contents of **impurity** gases.

**SOLUTION:** This device has a treating vessel 1 capable of being evacuated, a gas introducing means 15 for introducing a treating gas into the treating vessel 1 and a gas volume detector 45 outputting gas volume signals corresponding to the gaseous partial pressures in the treating vessel for the classification of the gases. The gas volume detector 45 is constituted in such a manner that the detected sensitivity is set in accordance with sensitivity **correcting signals** given from the outside, and the gas volume signals are produced by the set detected sensitivity and are outputted. A controlling means receives the gas volume signals outputted from the gas volume detector 45 and transmits the sensitivity **correcting signals** to the gas volume detector 45 in such a manner that the dimension of the gas volume signal corresponding to one standard gas selected from the gases contained in the treating gas approaches the target value.

14/9/6

DIALOG(R)File 347: JAPIO

04595597 \*\*Image available\*\*

**INDUCED PLASMA MASS SPECTROGRAPH****Pub. No.:** 06-267497 [JP 6267497 A ]**Published:** September 22, 1994 (19940922)**Inventor:** NAKAGAWA YOSHITOMO

ITOU TETSUMASA

**Applicant:** SEIKO INSTR INC [000232] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 05-048400 [JP 9348400]**Filed:** March 09, 1993 (19930309)**International Class:** [ 5 ] H01J-049/26; G01N-027/62**JAPIO Class:** 42.3 (ELECTRONICS -- Electron Tubes); 46.2 (INSTRUMENTATION -- Testing)**JAPIO Keyword:** R004 (PLASMA)**Journal:** Section: E, Section No. 1646, Vol. 18, No. 672, Pg. 40, December 19, 1994 (19941219)**ABSTRACT**

**PURPOSE:** To lengthen the life of a detector in an induced **plasma** mass spectrograph, to widen the **measuring** range of highly concentrated **impurity** and to provide an inexpensive detecting system by changing the quantity of ions entered into the detector with the concentration of each of **impurities measured** so as to count the ions.

**CONSTITUTION:** A perforated auxiliary electrode 30 which directs ions passing through a mass filter 10 to a detector 13 is arranged between the axis of the filter 10 and the detector 13, and a means which impresses voltages respectively upon a repeller 12 and the auxiliary electrode 30 is arranged to **change voltage** difference between the repeller 12 and the electrode 30 with the concentration of each of **impurities measured**. Also when the concentration of the **impurity measured** is high, potential difference between the repeller 12 and the auxiliary electrode 30 is increased more than that set when the low concentrated **impurity** was **measured**. This structure can lengthen the life of the detector 13, increase the measuring range of the highly concentrated impurity to that of about six figures and also provide an inexpensive detecting system.

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DIALOG(R)File 347: JAPIO

04551956 \*\*Image available\*\*

**FUEL CELL GENERATOR****Pub. No.:** 06-223856 [JP 6223856 A ]**Published:** August 12, 1994 (19940812)**Inventor:** NISHIHARA YOSHINORI**Applicant:** FUJI ELECTRIC CO LTD [000523] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 05-008670 [JP 938670]**Filed:** January 22, 1993 (19930122)**International Class:** [ 5 ] H01M-008/06; H01M-008/04**JAPIO Class:** 42.9 (ELECTRONICS -- Other); 13.9 (INORGANIC CHEMISTRY -- Other); 35.0 (NEW ENERGY SOURCES -- General)**Journal:** Section: E, Section No. 1627, Vol. 18, No. 586, Pg. 130, November 09, 1994 (19941109)**ABSTRACT**

**PURPOSE:** To moderate the poisoning of **electrode** catalyst by increasing or decreasing reformed gas supply amount, if CO concentration deviates from an allowable value, depending on its deviation.

**CONSTITUTION:** A fuel cell mainframe 1 is an accumulator that the unit cells of a phosphoric-acid type fuel cell battery with an oxidant **electrode** 1b and a fuel **electrode** 1a are accumulated. A reformed gas supply device 2 supplies reformed gas 3 to the fuel **electrode** 1a. An **impurities gas** concentration **detecting** means 5 detects the concentration of carbon monoxide CO contained in the reformed gas 3 and outputs an output signal 5a. A thermocouple 6 detects the temperature of the mainframe 1 and outputs an output signal 6a and a reactive gas supply amount **control** device 7 outputs a **signal** 7a in terms of the supply amount of the reformed gas 3 and reactive air corresponding to the load quantity of the mainframe 1. A fuel cell supply amount control device 8 finds an allowable reformed gas CO concentration value. When the concentration value deviates from the allowable value, the output signal 8a is output to the control device 7 to increase or decrease the reformed gas supply amount depending on its deviation, so that the poisoning of **electrode** catalyst can be moderated.



24/9/8

DIALOG(R)File 347: JAPIO

03443564 \*\*Image available\*\*

**AIR PURIFIER**

**Pub. No.:** 03-106464 [JP 3106464 A ]

**Published:** May 07, 1991 (19910507)

**Inventor:** INUI HIROFUMI

TERAI HARUO

SATO TAKETOSHI

**Applicant:** MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation) ,  
JP (Japan)

**Application No.:** 01-243813 [JP 89243813]

**Filed:** September 20, 1989 (19890920)

**International Class:** [ 5 ] B03C-003/68; B03C-003/14; F24F-007/00; F24F-007/007

**JAPIO Class:** 24.3 (CHEMICAL ENGINEERING -- Mixing, Separation & Chrushing); 24.2  
(CHEMICAL ENGINEERING -- Heating & Cooling)

**Journal:** Section: C, Section No. 853, Vol. 15, No. 293, Pg. 70, July 25, 1991 (19910725)

**ABSTRACT**

**PURPOSE:** To purify air by automatically detecting dust or pollen in air to rotate a suction fan and collecting the dust or pollen in air by a filter.

**CONSTITUTION:** Dust in air is collected by a filter 10 and a suction fan is rotated by a motor 12. High voltage is generated by a high voltage generating means 13 and the space applying the high voltage from the high voltage generating means 13 is provided to a discharge **electrode** 14. Further, a **change** of the **voltage** or **current** value of the aforementioned high voltage is **detected** by a **contamination** detection means 15 to **detect** the **contamination** of **air**. The motor 12 is controlled on the basis of the signal from the **contamination detection** means 15 by a motor control means 16. That is, the dust or pollen in air is automatically detected to rotate the suction fan and the dust or pollen in air is collected by filter to make it possible to purify air.

24/9/11

DIALOG(R)File 347: JAPIO

01700660 \*\*Image available\*\*

## AIR CLEANER

**Pub. No.:** 60-179160 [JP 60179160 A ]

**Published:** September 13, 1985 (19850913)

**Inventor:** SHIRAGAKI SHIGERU

ICHIDA SHUNJI

**Applicant:** YAMATAKE HONEYWELL CO LTD [000666] (A Japanese Company or Corporation), JP (Japan)

**Application No.:** 59-035273 [JP 8435273]

**Filed:** February 28, 1984 (19840228)

**International Class:** [ 4 ] B03C-003/68

**JAPIO Class:** 24.3 (CHEMICAL ENGINEERING -- Mixing, Separation & Chrushing); 24.2 (CHEMICAL ENGINEERING -- Heating & Cooling); 32.1 (POLLUTION CONTROL -- Exhaust Disposal)

**Journal:** Section: C, Section No. 326, Vol. 10, No. 28, Pg. 33, February 04, 1986 (19860204)

## ABSTRACT

**PURPOSE:** To operate automatically an air cleaner in accordance with the degree of **dirty** of **air** in a **chamber** and to enable display of the cleaning period for a dust collection **electrode** by combining a gas sensor with an electronic air cleaner.

**CONSTITUTION:** An air cleaner is constituted so that a gas sensor 11 is arranged at the position of upstream side of a dust collection part 3 and the output from the gas sensor 11 is supplied to a controller 12. The degree of dirt at an inlet side of an outlet side of the dust collection part 3 is measured with the controller 12 on the basis of the output signal from the gas sensor 11, and a **control signal** is outputted from the **controller** 12 by which high **voltage** D.C. electric source 4 is turned-on when the degree of dirt reaches an upper limit value previously set and turned-off when said degree lowers till the lower limit value. As a result, the degree of **dirt** for **air** which is **detected** with the gas sensor 11 is changed between the upper limit value and the lower limit value. In case of providing the gas sensor 11 to the downstream side of said part 3, the output signal of the gas sensor 11 can be utilized as **detection** of degree of **dirt** for a dust collection **electrode** at the part 3.

24/9/12

DIALOG(R)File 347: JAPIO

01645259 \*\*Image available\*\*

**METHOD FOR DETECTING CONTAMINATION OF OXYGEN GAS SENSOR****Pub. No.:** 60-123759 [JP 60123759 A]**Published:** July 02, 1985 (19850702)**Inventor:** SAKANAKA MASAO

TANAKA TAKEO

**Applicant:** FUJI ELECTRIC CO LTD [000523] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 58-231045 [JP 83231045]**Filed:** December 07, 1983 (19831207)**International Class:** [ 4 ] G01N-027/26; G01N-027/58**JAPIO Class:** 46.2 (INSTRUMENTATION -- Testing)**Journal:** Section: P, Section No. 403, Vol. 09, No. 281, Pg. 99, November 08, 1985 (19851108)**ABSTRACT**

**PURPOSE:** To make it possible to inspect the **contamination** of an oxygen **sensor** at a measuring position, in a direct insert type solid **electrode** oxygen gas sensor, by stopping the injection of gas to be measured while changing over said gas to gas with a definite oxygen concentration before calculating a time required in reaching a predetermined voltage value.

**CONSTITUTION:** **Electrodes** 2, 3 are provided to the zirconia electrolyte cylindrical pipe 1 of an oxygen sensor 32 so as to be opposed to the bottom thereof. Gas to be measured is introduced into the flowline 8a of a collecting tube 12 and contacted with the **electrode** 2 to detect voltage and flowed out from a flowline 8b. Next, the injection of the gas to be measured is stopped and gas with definite oxygen concentration is introduced from an introducing port 14 by a pump 15 to fill the **electrode** 2 and the flowlines 8a, 8b and, thereafter, the pump 15 is stopped to detect voltage. The measured voltages are applied to a converter 17 and the gas to be measured is **changed** to a **signal** S(sub 1) and the gas with a definite oxygen concentration to a signal Sa while a time after the stopping of the pump 15 required in bringing the signal difference (Sa-S(sub 1)) to a predetermined signal value .delta.S is detected by a comparator circuit 19 and, when this time is larger than a predetermined time, it is shown that the **sensor** collecting tube is **contaminated**. Therefore, a contamination state can be inspected while the sensor is arranged at a measuring position.

24/9/15

DIALOG(R)File 347: JAPIO

00771559 \*\*Image available\*\*

**AIR PURIFIER WITH METER DISPLAYING AIR PURIFICATION DEGREE****Pub. No.:** 56-091859 [JP 56091859 A]**Published:** July 25, 1981 (19810725)**Inventor:** OTSUKA KEIZO

SAWAHATA SHOICHI

KAWAMOTO MASAICHI

**Applicant:** HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 54-168308 [JP 79168308]**Filed:** December 26, 1979 (19791226)**International Class:** [ 3 ] B03C-003/74**JAPIO Class:** 24.3 (CHEMICAL ENGINEERING -- Mixing, Separation & Chrushing); 32.1 (POLLUTION CONTROL -- Exhaust Disposal); 46.1 (INSTRUMENTATION -- Measurement)**Journal:** Section: C, Section No. 75, Vol. 05, No. 160, Pg. 135, October 15, 1981 (19811015)**ABSTRACT**

**PURPOSE:** To display an **air pollution** value based upon the variation modulus of a detected ion current corresponding to a concentration of a **pollution** particle in a supplied **polluted air** by **detecting** a part of the ion current in a detecting **electrode** of an electron charge part of an electric dust collector.

**CONSTITUTION:** In the electric dust collector 1 in the air purifier, corona discharge is generated between a discharge **electrode** 2A and a ground **electrode** 2B to which high voltage is applied by a power source 3 and the **polluted air** induced to a direction shown by an arrow by an air blower 5 is purified and discharged as purified air. The meter 1 of the air purification degree consists of a detecting part 4, an amplifier part 11 and a DC ammeter 10. In the detecting part 4, the detecting **electrode** 4A is provided to an inflow side of an air stream so as to be faced against the discharge **electrode** 2A of the electric dust collector. When the **polluted air** is flowed in, impedance in a corona electric field is **increased** and **current** passed to the detecting **electrode** 4A is reduced. This reduction rate is amplified by the amplifier 9 and inputted to the ammeter 10 and, by the scale thereof, the **air pollution** degree is displayed.

8/9/2

DIALOG(R)File 347: JAPIO

06663831 \*\*Image available\*\*

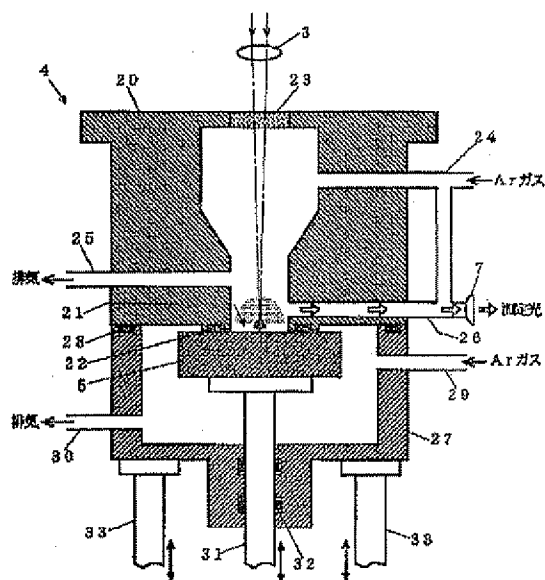
**LASER-EXCITED PLASMA EMISSION SPECTROPHOTOMETER****Pub. No.:** 2000-249655 [JP 2000249655 A]**Published:** September 14, 2000 (20000914)**Inventor:** FUKUI ISAO

MIYAMA TAKAO

**Applicant:** SHIMADZU CORP**Application No.:** 11-050133 [JP 9950133]**Filed:** February 26, 1999 (19990226)**International Class:** G01N-021/73; G01J-003/443

**PROBLEM TO BE SOLVED:** To perform a high-accuracy **analysis** by preventing a **contamination** inside an **analytical chamber**.

**SOLUTION:** In a main **chamber** 20, a sample opening 21 is formed in the opposite position of a window plate 23 for laser transmission, and a sample 5 is pressed by a pressure body 31 so as to be brought into close contact in such a way that a sample face is exposed in the opening 21. In addition, an auxiliary **chamber** 27 is brought into close contact with the main **chamber** 20 so as to surround the sample 5. The inside of the main **chamber** 20 and the inside of the auxiliary **chamber** 27 are kept independently airtight by keeping a gap from the sample 5. Since only a part of the sample 5 is exposed inside the main **chamber** 20, a contamination due to an undesired component which sticks to the sample 5 can be suppressed to a minimum.



8/9/23

DIALOG(R)File 347: JAPIO

05449332 \*\*Image available\*\*

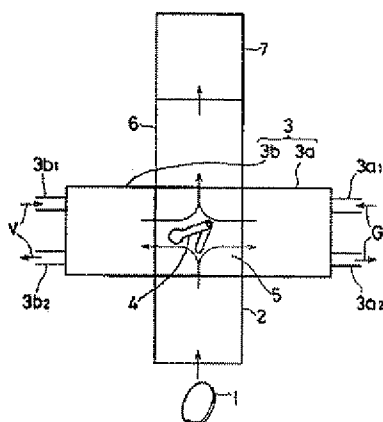
**SEMICONDUCTOR ANALYZER****Pub. No.:** 09-064132 [JP 9064132 A ]**Published:** March 07, 1997 (19970307)**Inventor:** IMAMURA YUKINO

JINBO TOMOKO

**Applicant:** HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 07-219368 [JP 95219368]**Filed:** August 29, 1995 (19950829)**International Class:** [ 6 ] H01L-021/66; G01N-001/28; G01N-001/32; G01N-027/62; G01N-033/20; G01N-021/31**JAPIO Class:** 42.2 (ELECTRONICS -- Solid State Components); 36.1 (LABOR SAVING DEVICES -- Industrial Robots); 46.2 (INSTRUMENTATION -- Testing)**JAPIO Keyword:** R004 (PLASMA)

**PROBLEM TO BE SOLVED:** To **analyze** metallic **contamination** contained in the surface of a semiconductor wafer and a film formed on a semiconductor substrate accurately regardless of the kinds of the surface and the film.

**SOLUTION:** This semiconductor analyzer is composed of a load lock **chamber** 2, in which a semiconductor wafer 1 is taken, and a first and second etching **chambers** 3a, 3b, in which the surface of the semiconductor wafer 1 and a thin-film formed onto the semiconductor wafer 1 are removed by dry etching technique and vapor etching technique respectively. The semiconductor analyzer has a treating **chamber** 3, in which the semiconductor wafer 1 in the load lock **chamber** 2 is introduced to either of these etching **chambers** 3a, 3b, an extracting **chamber** 6 extracting metallic contamination existing on the semiconductor wafer 1 after the completion of treatment in the treating **chamber** 3, and an analyzing section 7 **analyzing** the extracted metallic **contamination**.



8/9/27

DIALOG(R)File 347: JAPIO

05159055 \*\*Image available\*\*

**SURFACE ANALYZER FOR MAGNETIC DISC****Pub. No.:** 08-114555 [JP 8114555 A ]**Published:** May 07, 1996 (19960507)**Inventor:** MATSUNUMA SATORU

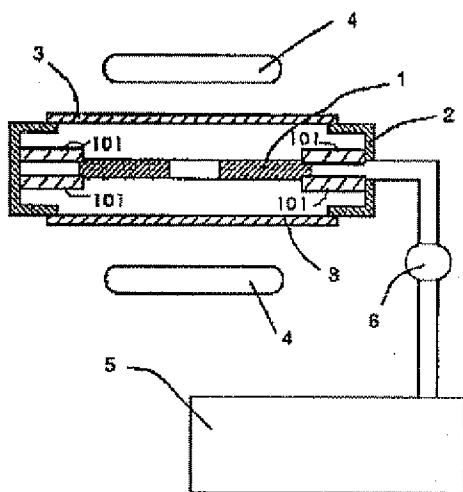
SUDO RYOICHI

KATAOKA FUMIO

**Applicant:** HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 06-252319 [JP 94252319]**Filed:** October 18, 1994 (19941018)**International Class:** [ 6 ] G01N-021/88; G11B-005/84**JAPIO Class:** 46.2 (INSTRUMENTATION -- Testing); 42.5 (ELECTRONICS -- Equipment)**JAPIO Keyword:** R002 (LASERS); R003 (ELECTRON BEAM); R004 (PLASMA); R020 (VACUUM TECHNIQUES)

**PURPOSE:** To provide an **analyzer** for **detecting** the **pollutant** of the organic compound at a fine quantity on the sample and for identifying it.

**CONSTITUTION:** This device is provided with a **container** 2, a sample mount 101 for holding the sample 1 in the **container** 2, a light source 4 for emitting the light to the sample 1, and an **analyzer** 5 for **analyzing** the **pollutant** free from the sample 1. At this stage, the light source 4 emits the light at the wave length for exciting at least one compound of the organic compound having the double bond.



8/9/35

DIALOG(R)File 347: JAPIO

04507901 \*\*Image available\*\*

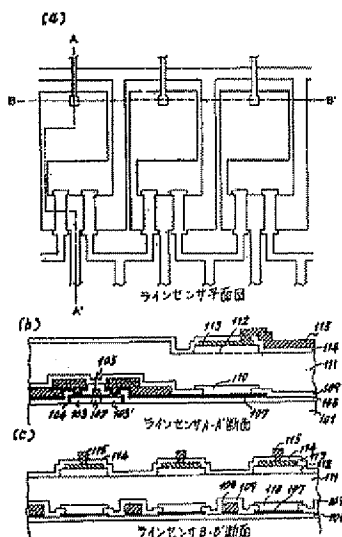
**PHOTOELECTRIC CONVERTER AND MANUFACTURE THEREOF****Pub. No.:** 06-151801 [JP 6151801 A ]**Published:** May 31, 1994 (19940531)**Inventor:** GOFUKU IHACHIROU KOZUKA HIRAKI

YAMANOBE MASATO TABATA IZUMI

**Applicant:** CANON INC [000100] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 04-327569 [JP 92327569]**Filed:** November 13, 1992 (19921113)**International Class:** [ 5 ] H01L-027/146; H04N-005/335**JAPIO Class:** 42.2 (ELECTRONICS -- Solid State Components); 29.4 (PRECISION INSTRUMENTS -- Business Machines); 44.6 (COMMUNICATION -- Television); 44.7 (COMMUNICATION -- Facsimile)**JAPIO Keyword:** R004 (PLASMA); R020 (VACUUM TECHNIQUES); R095 (ELECTRONIC MATERIALS -- Semiconductor Mixed Crystals); R096 (ELECTRONIC MATERIALS -- Glass Conductors); R097 (ELECTRONIC MATERIALS -- Metal Oxide Semiconductors, MOS)**Journal:** Section: E, Section No. 1597, Vol. 18, No. 461, Pg. 152, August 26, 1994 (19940826)

**PURPOSE:** To provide a photoelectric converter having high reliability by devising structure capable of conducting isolation without increasing dark currents.

**CONSTITUTION:** In a photoelectric converter, in which a high-concentration impurity layer 110 and an electrode layer 107 formed under a semiconductor layer 111, to which impurities for controlling the semiconductor type of the photoelectric converter having P-I-N structure are not added or only a trace quantity of impurities are added, are **isolated** at every picture element, the surfaces of the high-concentration impurity layers 110 **isolated** at every picture element are etched chemically in a vapor phase in a vacuum equipment **chamber**, and the semiconductor layer 111, to which impurities for controlling the semiconductor type are not added or only a trace quantity of impurities are added, is deposited without breaking a vacuum.





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DIALOG(R)File 347: JAPIO

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**SAMPLE INTRODUCING DEVICE****Pub. No.:** 05-142124 [JP 5142124 A ]**Published:** June 08, 1993 (19930608)**Inventor:** HATANAKA TOSHIJI**Applicant:** SHIMADZU CORP [000199] (A Japanese Company or Corporation), JP (Japan)**Application No.:** 03-328152 [JP 91328152]**Filed:** November 15, 1991 (19911115)**International Class:** [ 5 ] G01N-001/28; G01N-021/15**JAPIO Class:** 46.2 (INSTRUMENTATION -- Testing)**JAPIO Keyword:** R004 (PLASMA); R007 (ULTRASONIC WAVES)**Journal:** Section: P, Section No. 1616, Vol. 17, No. 522, Pg. 80, September 20, 1993 (19930920)

**PURPOSE:** To prevent the **contamination** of sample to be **analyzed** by a preceding sample through a sample feeding device so as to reduce the time loss caused by the washing of the device by coupling a plurality of sample feeding devices to an analyzer through a switching means and washing one sample feeding device while the other sample feeding device is used.

**CONSTITUTION:** When the analysis of one sample is completed through a sample atomizer N1, another sample atomizer N2 is connected to a **plasma** torch T by means of a switching means V and the sample suction tube P1 of the atomizer N1 is inserted into a washing **vessel** W for washing. On the other hand, the sample sucking tub P2 of the atomizer N2 is inserted into the **container** containing the next sample solution and the analysis of the sample is started. Since the atomizer N1 is connected to the torch T and a through hole 12 is connected to the opening 22 of a valve main body 2 when the direct coupling opening of the torch T is aligned with a through hole 11, a gas is discharged through the opening 22. When the suction tube P2 is inserted into the **vessel** W under such condition, the atomizer N2 is washed with a washing solution. When the through hole 12 is aligned with the opening of the main body 2, on the contrary, the atomizer N1 is connected to the torch T and a sample is introduced to the torch T.

